

**AMENDMENTS TO THE CLAIMS**

**Claims 1-12 (canceled)**

**Claim 13 (currently amended):** An illuminating and irradiating unit for ophthalmic instruments, comprising:

an illumination source;

means for generating specific illumination patterns and/or profiles; and

means for coupling light from the illumination source a complete one of the specific illumination patterns and/or profiles into the a parallel beam path of the observation system of the ophthalmic instrument;

wherein optical filters, diaphragms, and/or optoelectronic light modulators with a control unit are used as the means for generating specific illumination patterns and/or profiles.

**Claim 14 (previously presented):** The illuminating and irradiating unit according to Claim 13, further comprising:

a monitoring unit for monitoring the radiation dose, for recording the irradiation patterns, and for registering the irradiated positions.

**Claim 15 (previously presented):** The illuminating and irradiating unit according to Claim 13;

wherein the monitoring unit has one or more interfaces for transferring data.

**Claim 16 (previously presented):** The illuminating and irradiating unit according to Claim 13;

wherein the illumination source generates narrow-band light in the short-wavelength  
range of around 365 nm.

**Claim 17 (canceled)**

**Claim 18 (previously presented):** The illuminating and irradiating unit according to  
Claim 13;

wherein the illumination source generates narrow-band light in the long-wavelength  
range of around 690 nm.

**Claims 19-20 (canceled)**

**Claim 21 (previously presented):** The illuminating and irradiating unit according to  
Claim 13;

wherein a beamsplitter which is used for coupling in light from the illumination source  
simultaneously serves as a blocking filter to protect the observer from excessive  
levels of irradiation by the illumination light.

**Claim 22 (previously presented):** The illuminating and irradiating unit according to  
Claim 13;

wherein the illumination source is not arranged within the illumination unit but rather  
as a separate structural component part and is connected to the means for  
generating specific illumination patterns and/or profiles by means of a light guide.

**Claim 23 (previously presented):** The illuminating and irradiating unit according to  
Claim 13;

wherein an eyetracker unit is provided in addition for monitoring the orientation of the illumination patterns on the areas to be irradiated during irradiation and/or for tracking.

**Claim 24 (previously presented):** The illuminating and irradiating unit according to Claim 13;

which is conceived as a modular unit for retrofit installation in the parallel beam path of an ophthalmic instrument.

**Claim 25 (previously presented):** The illuminating and irradiating unit according to Claim 13;

which can be used in combination with subassemblies such as a wavefront measuring unit and/or a topography system and/or an eye axis length measurement device for different ophthalmic instruments.

**Claim 26 (previously presented):** The illuminating and irradiating unit according to Claim 13;

which can be arranged in a shared housing with other subassemblies such as a wavefront measuring unit and/or a topography system and/or an eye axis length measuring device.

**Claim 27-29 (canceled)**